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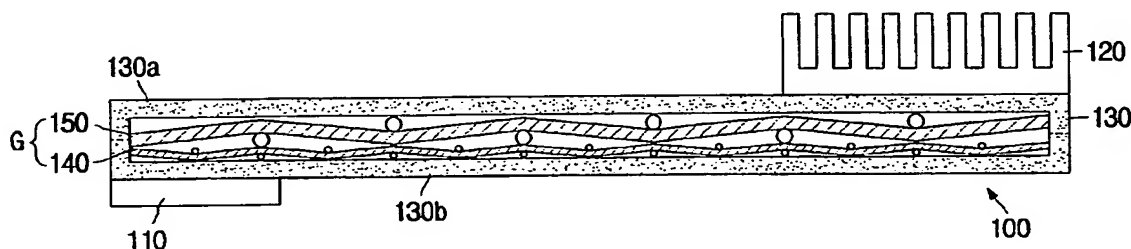
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(54) Title: FLAT PLATE HEAT TRANSFER DEVICE AND METHOD FOR MANUFACTURING THE SAME



(57) Abstract: A flat plate heat transfer device contacted with heat source and heat-emitting unit at both end transfers heat generated at the heat source to the heat-emitting unit horizontally. The device includes a thermally-conductive flat case containing a working fluid evaporated with absorbing heat from the heat source and condensed with emitting heat to the heat-emitting unit; and a mesh aggregate installed in the case so that coarse and fine meshes in which wires are woven to be alternately crossed up/down are vertically laminated in contact. The coarse mesh gives main-directional and sub-directional vapor dispersion channels with different sectional areas at each crossing point of the mesh wires for vapor to flow therethrough. The main-directional vapor dispersion channel with relatively larger sectional area is parallel to heat transfer direction. The fine mesh gives liquid flow channels along running direction of the mesh wire from each crossing point of the mesh wires.

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